



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
SMALL AIRCRAFT, ROTORCRAFT, GLIDERS,  
BALLOONS, & AIRSHIPS**

**BIWEEKLY 2009-23**

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Federal Aviation Administration  
Regulatory Support Division  
Delegation and Airworthiness Programs Branch, AIR-140  
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## SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;

### Biweekly 2009-01

2008-17-51		MD Helicopters, Inc	Rotorcraft: MD900
2008-26-01	S 2008-11-17	Air Tractor, Inc	See AD
2008-26-02	S 2006-06-51	General Electric Company	Engine: CT7-8A
2008-26-05		Bombardier-Rotax GmbH	Engine: 914 F
2008-26-10		Cessna	See AD
2008-26-11		Piper	See AD
2008-26-12		Aircraft Industries a.s	Sailplane: L 23 Super Blanik

### Biweekly 2009-02

No Small Aircraft ADs were issued during Biweekly 2009-02.

### Biweekly 2009-03

2009-01-11		Turbomeca	Engine: Arriel 2B and 2B1
2009-02-02		Polskie Zaklady Lotnicze Spolka zo.o	PZL M26 01
2009-02-03		Lycoming Engines, SeeAD	Engine: See AD

### Biweekly 2009-04

No Small Aircraft ADs were issued during Biweekly 2009-04.

### Biweekly 2009-05

2008-02-08	S 2006-21-11	Turbomeca	Engine: Turmo IV A and IV C
2009-03-04		Turbomec	Engine: Arriel 1E2, 1S, and 1S1
2009-03-05		Pratt Whitney Canada	Engine: PW206A, PW206B, PW206B2, PW206C, PW206E, PW207C, PW207D, and PW207E
2009-04-01		Wytownia Sprzetu Komunikacyjnego	Engine: PZL-10W
2009-04-04		Cessna	401, 401A, 401B, 402, 402A, 402B
2009-04-05		Cessna	182Q and 182R
2009-04-08		BURKHART GROB LUFT- UND RAUMFAHRT GmbH & CO KG	Glider: G103 TWIN II, G103A TWIN II ACRO, G103C TWIN III ACRO, G 103 C TWIN III
2009-04-09	S 2008-11-10	Viking Air Limite	DHC-6-1, DHC-6-100, DHC-6-200, and DHC-6-300
2009-04-14		PILATUS AIRCRAFT LTD	PC-12/47E
2009-05-01	S 2007-04-12	Gippsland Aeronautics Pty. Ltd	GA8
2009-05-05		Avidyne Corporation	Primary Flight Displays
2009-05-06		Embraer	EMB-500

### Biweekly 2009-06

2009-05-07	S 2008-06-17	Pilatus Aircraft Ltd	PC-12, PC-12/45, PC-12/47, PC-12/47E
2009-05-12		Cessna	208 and 208B

### Biweekly 2009-07

2009-05-08		Trimble or Freeflight Systems	Appliance: Global positioning system (GPS)
2009-05-09		Bell Helicopter Textron, Inc.	Rotorcraft: 412, 412EP, 412CF
2009-06-01		Eurocopter France	Rotorcraft: EC 155B and EC155B1
2009-06-07		Agusta S.p.A.:	Rotorcraft: AB139 and AW139
2008-07-51	E	Bell Helicopter Textron Canada	Rotorcraft: 206A, 206B, and 206L and 407 and 427
2009-07-52	E, S 2009-07-52	Bell Helicopter Textron Canada	Rotorcraft: 206A, 206B, and 206L and 407 and 427
2009-07-53	E	Sikorsky Aircraft	Rotorcraft: S-92A

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<b>Biweekly 2009-08</b>			
2006-08-08 R1	R	Air Tractor, Inc.	AT-400, AT-401, AT-401B, AT-402, AT-402A, and AT-402B
2009-07-08		Piper	PA-46-350P and PA46R-350T
2009-07-09		DORNIER Luftfahrt GmbH	228-100, Dornier 228-101, Dornier 228-200, Dornier 228-201, Dornier 228-202, and Dornier 228-212
2009-07-13		MD Helicopters, Inc.	Rotorcraft: MD900
2009-07-14		Diamond Aircraft Industries GmbH	DA 40
2009-08-03	S 2007-19-52	Bell Helicopter Textron Canada Limited	Rotorcraft: 206A, 206B, 206L, 206L-1, 206L-3, 206L-4, 222, 222B, 222U, 230, 407, 427, and 430
2009-08-05		Liberty Aerospace Incorporated	XL-2
<b>Biweekly 2009-09</b>			
2009-07-52	FR	Bell Helicopter Textron Canada Limited	Rotorcraft: 206A series, 206B series, and 206L
2009-08-08		Turbomeca	Engine: Arriel 1B, 1D, and 1D1, Arriel 2B, and 2B1
2009-08-09		EADS SOCATA	TBM 700
2009-08-10	S 2009-04-14	Pilatus Aircraft Ltd	PC-12/47E
2009-08-11		Pilatus Aircraft Ltd	PC-12 and PC-12/45
2009-09-51	E	EUROCOPTER FRANCE	Rotorcraft: EC225LP
<b>Biweekly 2009-10</b>			
2009-07-53	FR	Sikorsky Aircraft Corporation	Rotorcraft: S-92A
2009-09-03		Turbomeca S.A.	Engine: Arriel 2B and 2B1
2009-09-04		EADS-PZL	PZL-104 WILGA 80
2009-09-09		Cessna	LC40-550FG, LC41-550FG, LC42-550FG
<b>Biweekly 2009-11</b>			
2009-10-04	S 2007-17-06	Diamond Aircraft	DA 40, DA 40F
2009-10-09		Cessna	See AD
2009-10-14		Hartzell	Propeller: See AD
2009-11-05	S 2008-10-12	Air Tractor, Inc.	AT-400, AT-400A, AT-402A, AT-402B, AT-502, AT-502A, AT-502B, AT-503A, AT-602, AT-802, AT-802A
<b>Biweekly 2009-12</b>			
2009-11-01	S 95-21-12	Eurocopter Deutschland GmbH	Rotorcraft: MBB-BK 117 A-1, A-3, A-4, B-1, B-2, and C-1
2009-11-06		M7 Aerospace LP	SA226-AT, SA226-T, SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, and SA227-DC (C-26B)
2009-11-10		Eurocopter Deutschland GmbH	EC135
2009-12-51	E	Turbomeca S.A.	Engine: Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1
<b>Biweekly 2009-13</b>			
2009-12-01		Bell Helicopter Textron, Inc	See AD
2009-12-07		Agusta S.p.A	Rotorcraft : A109E, A109S, A119, and AW119MKII
2009-12-12		ATR-GIE Avions de Transport Régional	ATR42-500, ATR72-212A
2009-12-14		Aeromot-Industria Mecanico Metalurgica Ltda	Glider: AMT-100, AMT-200, AMT-200S, AMT-300
2009-12-15		GROB-Werke	G120A
2009-12-16		Dornier Luftfahrt GmbH	228-100, 228-101, 228-200, 228-201, 228-202, 228-212
2009-13-01		Sikorsky	Rotorcraft: S-92A
2009-13-04		Dornier Luftfahrt GmbH	228-100, Dornier 228-101, Dornier 228-200, Dornier 228-201, Dornier 228-202, and Dornier 228-212
2009-13-05		Socata	TBM 700
2009-13-06		Piper	See AD

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<b>Biweekly 2009-14</b>			
2009-12-51	FR	Turbomeca S.A	Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1
2009-13-10		British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201
2009-14-01		Turbomeca S.A	Arrius 2F
<b>Biweekly 2009-15</b>			
2009-14-10	S 2009-09-04	EADS-PZL Warszawa-Okecie S.A.	PZL-104 WILGA 80
2009-14-11		Turbomeca S.A.	Engine: ARRIUS 2F
2009-14-13	S 2003-14-07	Pilatus Aircraft Ltd	PC-12, PC-12/45, PC-12/47, PC-12/47
2009-15-01		Hawker Beechcraft Corporation	G36
2009-15-05		Cessna Aircraft Company	208, 208B
<b>Biweekly 2009-16</b>			
2009-03-05	COR	Pratt & Whitney Canada	Engine: PW206A, PW206B, PW206B2, PW206C, PW206E, PW207C, PW207D, and PW207E
2009-15-13		Honeywell International Inc.	Engine: T5313B, T5317A, T5317A-1, T5317B, and T5317BCV
<b>Biweekly 2009-17</b>			
2007-03-17 R1		Socata	TBM 700
2009-15-14		Agusta S.p.A	Rotorcraft: AB139, AW139
2009-15-15		Bell Helicopter Textron Canada	Rotorcraft: 427
2009-16-02		Pilatus Aircraft Limited	PC-7
2009-16-03		Superior Air Parts, Inc. (SAP)	See AD
<b>Biweekly 2009-18</b>			
2009-17-05		Honeywell International Inc.	Engine: TPE331-10 and TPE331-11
2009-18-03	S 2007-19-14	Pilatus Aircraft Ltd.	PC-6, PC-6-H1, PC-6-H2, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/C1-H2
2009-18-04		Air Tractor, Inc.	AT-802, AT-802A
<b>Biweekly 2009-19</b>			
2009-18-17		Agusta S.p.A.	Rotorcraft: AB412 and AB412 EP
<b>Biweekly 2009-20</b>			
2009-19-03	S 2009-13-10	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201
2009-19-07		Teledyne Continental Motors	Engine: O-470, IO-470, TSIO-470, IO-520, TSIO-520, IO-550, and IOF-550
2009-19-51	E	Agusta S.p.A.	Rotorcraft: AB 139 and AW 139
<b>Biweekly 2009-21</b>			
2009-19-07	COR	Teledyne Continental Motors	Engine: See AD
2009-20-04		Glaser-Dirks Flugzeugbau GmbH	Glider: DC-100
2009-20-07		Dornier Luftfahrt GmbH	228-100, Dornier 228-101, Dornier 228-200, Dornier 228-201, and Dornier 228-202
2009-20-13		Glaser-Dirks Flugzeugbau GmbH	Glider: DC-100

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### Biweekly 2009-22

2009-21-11	Turbomeca S.A.	Engine: ARRIUS 1A
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### Biweekly 2009-23

2007-26-08 R1	Reims Aviation S.A.	F406
2009-10-09 R1	Cessna Aircraft Company	See AD
2009-22-02	American Champion Aircraft Corp	7ECA, 7GCAA, 7GCBC, 7KCAB, 8KCAB, and 8GCBC
2009-22-03	Hartzell Propeller Inc	Propeller: ()HC-()2Y(K,R)-()
2009-22-04	Eurocopter France	Rotorcraft: EC 155B and EC155B1
2009-22-11	Bell Helicopter Textron Canada	Rotorcraft : 407, 427
2009-23-01	Hawker Beechcraft Corporation	1900, 1900C, 1900D
2009-23-51	Skiersky Aircraft Corp	Rotorcraft: S-92A



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## **AIRWORTHINESS DIRECTIVE**

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**2007-26-08 R1 Reims Aviation S.A.:** Amendment 39-16067; Docket No. FAA-2007-0115;  
Directorate Identifier 2007-CE-080-AD.

### **Effective Date**

- (a) This airworthiness directive (AD) becomes effective December 4, 2009.

### **Affected ADs**

- (b) This AD rescinds AD 2007-26-08.

### **Applicability**

- (c) This AD applies to Model F406 airplanes, all serial numbers, that are:  
(1) equipped with landing gear emergency blowdown bottle part number (P/N) 9910154-4;  
and  
(2) certificated in any category.

Issued in Kansas City, Missouri, on October 23, 2009.

Kim Smith,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.



**FAA**  
**Aircraft Certification Service**

## AIRWORTHINESS DIRECTIVE

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[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

**2009-10-09 R1 Cessna Aircraft Company:** Amendment 39-16074; Docket No. FAA-2007-27747; Directorate Identifier 2007-CE-030-AD.

### Effective Date

- (a) This AD becomes effective on December 11, 2009.

### Affected ADs

- (b) This AD revises AD 2009-10-09, Amendment 39-15904.

### Applicability

- (c) This AD applies to the following airplane models and serial numbers that are certificated in any category:

Models	Serial Numbers
(1) 150F	15061533 through 15064532
(2) 150G	15064533 through 15064969 and 15064971 through 15067198
(3) 150H	15067199 through 15069308 and 649
(4) 150J	15069309 through 15071128
(5) 150K	15071129 through 15072003
(6) 150L	15072004 through 15075781
(7) 150M	15075782 through 15079405
(8) A150K	A1500001 through A1500226
(9) A150L	A1500227 through A1500432 and A1500434 through A1500523
(10) A150M	A1500524 through A1500734 and 15064970
(11) F150F	F150-0001 through F150-0067
(12) F150G	F150-0068 through F150-0219
(13) F150H	F150-0220 through F150-0389
(14) F150J	F150-0390 through F150-0529
(15) F150K	F15000530 through F15000658
(16) F150L	F15000659 through F15001143



(17) F150M	F15001144 through F15001428
(18) FA150K	FA1500001 through FA1500081
(19) FA150L	FA1500082 through FA1500120
(20) FA150L or FRA150L	FA1500121 through FA1500261 that are equipped with FKA150-2311 and FKA150-2316, or FRA1500121 through FRA1500261
(21) FA150M or FRA150M	FA1500262 through FA1500336 that are equipped with FKA150-2311 and FKA150-2316, or FRA1500262 through FRA1500336
(22) 152	15279406 through 15286033
(23) A152	A1520735 through A1521049, A1500433, and 681
(24) F152	F15201429 through F15201980
(25) FA152	FA1520337 through FA1520425

Note: This AD revision clarifies the applicability of AD 2009-10-09, eliminates a duplicate requirement for replacement of safety wire with jamnuts, and clarifies the intent of the conditional acceptability of using modification kit P/N SK152-25 as a terminating requirement to the AD. No further action is required for those already in compliance with AD 2009-10-09.

### **Unsafe Condition**

(d) Aircraft in full conformity with type design can exceed the travel limits set by the rudder stops. We are issuing this AD to prevent the rudder from traveling past the normal travel limit. Operation in this non-certificated control position is unacceptable and could cause undesirable consequences, such as contact between the rudder and the elevator.

### **Compliance**

(e) To address this problem, you must do either the actions in option 1 or option 2 of this AD, unless already done:

Actions	Compliance	Procedures
<p>(1) Option 1: For all airplanes that do not have modification kits part number (P/N) SK152-25A or P/N SK152-24A installed, do the following:</p> <p>(i) Insert the following text into the Limitations section of the FAA-approved airplane flight manual (AFM), and pilots operating handbook (POH):  “INTENTIONAL SPINS AND OTHER ACROBATIC/AEROBATIC MANEUVERS PROHIBITED PER AD 2009-10-09. NOTE: THIS AD DOES NOT PROHIBIT PERFORMING INTENTIONAL STALLS.”</p> <p>(ii) Fabricate a placard (using at least 1/8-inch letters) with the following words and install the placard on the instrument panel within the pilot’s clear view:  “INTENTIONAL SPINS AND OTHER ACROBATIC/AEROBATIC MANEUVERS PROHIBITED PER AD 2009-10-09.”</p> <p>(iii) The AFM and POH limitations in paragraph (e)(1)(i) of the AD and the placard in paragraph (e)(1)(ii) of this AD may be removed after either paragraph (e)(2)(i) or paragraph (e)(2)(ii) of this AD is done.</p>	<p>Within the next 100 hours time-in-service (TIS) after June 17, 2009 (the effective date retained from AD 2009-10-09), or within the next 12 months after June 17, 2009 (the effective date retained from AD 2009-10-09), whichever occurs first.</p>	<p>A person authorized to perform maintenance as specified in 14 CFR section 43.3 of the Federal Aviation Administration Regulations (14 CFR 43.3) is required to make the AFM and POH changes, fabricate the placard required in paragraph (e)(1)(i) of this AD, and make an entry into the aircraft logbook showing compliance with the portion of the AD per compliance with 14 CFR 43.9.</p>
<p>(2) Option 2: Install a rudder stop modification kit:</p> <p>(i) For airplanes with a forged bulkhead, replace the rudder stops, rudder stop bumpers, and attachment hardware with the new rudder stop modification kit P/N SK152-25A, which includes replacing the safety wire with jamnuts.</p> <p>(ii) For airplanes with a sheet metal bulkhead, replace the rudder stops, rudder stop bumpers, and attachment hardware with the new rudder stop modification kit P/N SK152-24A, which includes replacing the safety wire with jamnuts.</p>	<p>Within the next 100 hours TIS after June 17, 2009 (the effective date retained from AD 2009-10-09), or within the next 12 months after June 17, 2009 (the effective date retained from AD 2009-10-09), whichever occurs first.</p>	<p>Follow Cessna Aircraft Company Service Bulletin SEB01-1, dated January 22, 2001; and, as applicable, either Cessna Aircraft Company Service Kit SK152-25A, Revision A, dated February 9, 2001, or Cessna Aircraft Company Service Kit SK152-24A, Revision A, dated March 9, 2001.</p>

(f) Kit P/Ns SK152-24 and SK152-25, which are listed in SEB01-1, were superseded by kit P/Ns SK152-24A and SK152-25A. Cessna has not revised the service bulletin to reflect the new P/Ns. The kits P/Ns SK152-24 and SK152-25 will automatically be filled with P/Ns SK152-24A and SK152-25A, respectively.

(1) The P/N SK152-24 kit does not address the unsafe condition because the nutplate in the kit can not be used due to rivet spacing on the aft bulkhead. In addition, a note was added to kit P/N SK152-24A stating "some airplanes in this serial range may have a forged bulkhead installed after leaving the factory. Service Kit SK152-25A or later revision must be used to modify these airplanes." Therefore, kit P/N SK152-24 is not allowed for installation for this AD.

(2) The P/N SK152-25 kit did not address the unsafe condition because a washer that was too small, P/N NAS1149FN832P, was included in the kit. This error was corrected in the P/N SK152-25A kit. If a P/N SK152-25 kit is installed using the correct washer P/N NAS1149F0332P (and this information is recorded in the maintenance log), credit will be given for installing P/N SK152-25A kit because this was the only difference between the kits.

(3) If you previously installed a kit P/N SK152-24 or a kit P/N SK152-25 with washer P/N NAS1149FN832P, and you choose the Option 2 kit installation to comply with this AD, then kit P/N SK152-24A or either kit P/N SK152-25 with washer P/N NAS1149F0332P or kit P/N SK152-25A, as applicable, must be installed.

(4) If a P/N SK152-25 kit was installed prior to this AD and the washer P/N used in the installation is unknown (not recorded in the maintenance log), and you wish to use Option 2 to comply with this AD, the installed washer must be replaced with a P/N NAS1149F0332P washer, and this work must be recorded in the maintenance log.

### **Alternative Methods of Compliance (AMOCs)**

(g) The Manager, FAA, ATTN: Ann Johnson, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4105; fax: (316) 946-4107; e-mail: ann.johnson@faa.gov, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(h) AMOCs approved for AD 2009-10-09 are approved for this AD.

### **Material Incorporated by Reference**

(i) If you choose to comply with this AD using paragraph (e)(2) of this AD, you must use Cessna Aircraft Company Service Bulletin SEB01-1, dated January 22, 2001; and, as applicable, either Cessna Aircraft Company Service Kit SK152-25A, Revision A, dated February 9, 2001; or Cessna Aircraft Company Service Kit SK152-24A, Revision A, dated March 9, 2001, to do the actions required by this AD, unless the AD specifies otherwise.

(1) On June 17, 2009 (74 FR 22429, May 13, 2009), the Director of the Federal Register approved the incorporation by reference of Cessna Aircraft Company Service Bulletin SEB01-1, dated January 22, 2001; Cessna Aircraft Company Service Kit SK152-25A, Revision A, dated February 9, 2001; and Cessna Aircraft Company Service Kit SK152-24A, Revision A, dated March 9, 2001 under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, KS 67277.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:  
[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on October 27, 2009.

Kim Smith,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.



**FAA**  
**Aircraft Certification Service**

## **AIRWORTHINESS DIRECTIVE**

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**2009-22-02 American Champion Aircraft Corp.:** Amendment 39-16053; Docket No. FAA-2009-0745; Directorate Identifier 2009-CE-036-AD.

### **Effective Date**

- (a) This AD becomes effective on December 3, 2009.

### **Affected ADs**

- (b) None.

### **Applicability**

- (c) This AD applies to Models 7ECA, 7GCAA, 7GCBC, 7KCAB, 8KCAB, and 8GCBC airplanes, all serial numbers, that are:
- (1) Manufactured prior to 1989;
  - (2) Equipped with folding rear seat backs; and
  - (3) Certificated in any category.

### **Unsafe Condition**

(d) This AD results from an occurrence of the rear seat frame failing in flight. We are issuing this AD to detect and correct cracking of the rear seat back hinge area and excessive elongation of the rear seat hinge bolt hole, which could result in failure of the rear seat back. This failure could lead to a rear-seated pilot or passenger inadvertently interfering with the control stick while attempting to not roll to the rear of the airplane upon seat back failure. Consequently, this failure could result in loss of control.

### **Compliance**

- (e) To address this problem, you must do the following, unless already done:

<b>Actions</b>	<b>Compliance</b>	<b>Procedures</b>
(1) Inspect the rear seat back hinge area for cracking and elongation of the rear seat hinge bolt hole.	Within the next 25 hours time-in-service (TIS) after December 3, 2009 (the effective date of this AD) and repetitively thereafter at intervals not to exceed every 100 hours TIS or every 12 months, whichever occurs first.	Follow American Champion Aircraft Corp. Service Letter No. 431, dated July 20, 2009.
(2) If cracking or excessive elongation of the rear seat bolt hole is found during any inspection required in paragraph (e)(1) of this AD, replace the seat frame with a factory remanufactured seat frame, a new part number (P/N) 7-1500 (standard) seat frame, or a new P/N 7-1501 (wide) seat frame. Replacement of the seat frame terminates the repetitive inspections requirements of this AD.	Before further flight after the inspection where cracking or excessive elongation of the rear seat bolt hole is found.	Follow American Champion Aircraft Corp. Service Letter No. 431, dated July 20, 2009.
(3) You may at any time replace the rear seat frame with a factory remanufactured seat frame, a new part number (P/N) 7-1500 (standard) seat frame, or a new P/N 7-1501 (wide) seat frame to terminate the repetitive inspection requirements of this AD.	Not applicable.	Follow American Champion Aircraft Corp. Service Letter No. 431, dated July 20, 2009.

### **Alternative Methods of Compliance (AMOCs)**

(f) The Manager, Chicago Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Wess Rouse, Aerospace Engineer, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; telephone: (847) 294-8113; fax: (847) 294-7834. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

### **Material Incorporated by Reference**

(g) You must use American Champion Aircraft Corp. Service Letter No. 431, dated July 20, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact American Champion Aircraft Corporation, P.O. Box 37, 32032 Washington Ave., Rochester, Wisconsin 53167; telephone: (262)

534-6315; fax: (262) 534-2395; Internet: <http://www.amerchampionaircraft.com/Technical/Technical.html>.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on October 13, 2009.

Kim Smith,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.



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**Aircraft Certification Service**

## AIRWORTHINESS DIRECTIVE

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

**2009-22-03 Hartzell Propeller Inc.:** Amendment 39-16054. Docket No. FAA-2006-25244; Directorate Identifier 2006-NE-25-AD.

### Effective Date

(a) This airworthiness directive (AD) becomes effective November 12, 2009.

### Affected ADs

(b) This AD supersedes AD 2006-18-15, Amendment 39-14754.

### Applicability

(c) This AD applies to Hartzell Propeller Inc. ()HC-()2Y(K,R)-() series propellers with non-suffix serial number (SN) propeller hubs and propeller hubs suffix SN letter "E", installed on Lycoming O-, IO-, LO-, LIO-, TO-, LTO-, AIO-, AEIO-, and TIO-360 series reciprocating engines. These propellers and engines could be installed on, but not limited to:

O-360-A1A	Piper Aircraft	Comanche (PA-24)
	Lake Aircraft	Colonial (C-2, LA -4, 4A, or 4P)
	Mooney Aircraft	Mark "20B" (M-20B)
	Earl Horton	Pawnee (Piper PA-25)
	Partenavia	Oscar (P-66)
	Siai-Marchetti	(S-205)
	Procaer	Picchio (F-15-A)
	S.A.A.B.	Safir (91-D)
	Malmo	Vipan (MF-10B)
	Aero Boero	AB-180
	Beagle	Airedale (A-109)
	DeHavilland	Drover (DHA-3MK3)
	Kingsford-Smith	Bushmaster (J5-6)
O-360-A1AD	S.O.C.A.T.A.	Tabago TB-10



O-360-A1D	Piper Aircraft	Comanche (PA-24)
	Lake Aircraft	Colonial (LA -4, 4A, or 4P)
	Doyn Aircraft	Doyn-Beech (Beech 95)
	Mooney Aircraft	Master “21” (M-20E), Mark “20B”, “20D”, (M20B, M20C), Mooney Statesman (M-20G)
O-360-A1F6	Cessna Aircraft	Cardinal
O-360-A1F6D	Cessna Aircraft	Cardinal 177
	Teal III	TSC (1A3)
O-360-A1G6	Aero Commander	
O-360-A1G6D	Beech Aircraft	Duchess 76
O-360-A1H6	Piper Aircraft	Seminole (PA-44)
O-360-A1P	Aviat	Husky
O-360-A2A	Avion Jodel	D-140-B
	S.O.C.A.T.A.	Rallye Commodore (MS-893)
	Partenavia	Oscar (P-66)
	Beagle	Husky (D5-180) (J1-U)
O-360-A2D	Piper Aircraft	Comanche (PA-24), Cherokee “C” (PA-28 “180”)
	Mooney Aircraft	Master “21” (M-20D), Mark “21” (M-20E)
O-360-A2F	Dynac Aerospace Corp.	Aero Commander Model 100
O-360-A2G	Beech Aircraft	Sport
O-360-A3A	C.A.A.R.P.S.A.N.	(M-23III)
	Robin	Regent (DR400/180), Remorqueur (DR400/180R), R-3170
	S.O.C.A.T.A.	Rallye 180GT, Sportavia Sportsman (RS-180)
	Norman Aeroplane Co.	NAC-1 Freelance
	Nash Aircraft Ltd.	Petrel
O-360-A3AD	S.O.C.A.T.A.	TB-10
	Robin	Aiglon (R-1180T)
O-360-A4A	Piper Aircraft	Cherokee “D” (PA-28 “180”)

O-360-A4D	Varga	Kachina
O-360-A4G	Beech Aircraft	Musketeer Custom III
O-360-A4K	Grumman American	Tiger
	Beech Aircraft	Sundowner 180
O-360-A4M	Piper Aircraft	Archer II (PA-28 “18”)
	Valmet	PIK-23
O-360-A4N	Cessna Aircraft	172 (Optional)
O-360-A4P	Penn Yan	Super Cub Conversion
O-360-A5AD	C. Itoh and Co.	Fuji FA -200
O-360-B2C	Seabird Aviation	SB7L
O-360-C1A	Intermountain Mfg. Co.	Call Air (A-6)
O-360-C1E	Bellanca Aircraft	Scout (8GCBC-CS)
O-360-C1F	Maule	Star Rocket MX-7-180
O-360-C1G	Christen	Husky (A-1)
O-360-C2E	Bellanca Aircraft	Scout (8GCBC FP)
O-360-C4F	Maule	MX-7-180A
O-360-C4P	Penn Yan	Super Cub Conversion
O-360-F1A6	Cessna Aircraft	Cutlass RG
O-360-J2A	Robinson	R22
IO-360-B1A	Beech Aircraft	Travel-Air (B-95A)
	Doyn Aircraft	Doyn-Piper (PA -23 “200”)
IO-360-B1B	Beech Aircraft	Travel-Air (B-95B)
	Doyn Aircraft	Doyn-Piper (PA -23 “200”)
	Fuji	(FA-200)
IO-360-B1D	United Consultants	See-Bee
IO-360-B1E	Piper Aircraft	Arrow (PA-28 “180R”)
IO-360-B1F	Utva	75
IO-360-B2E	C.A.A.R.P.	C.A.P. (10)
IO-360-B1F6	Great Lakes	Trainer
IO-360-B1G6	American Blimp	Spector 42
IO-360-B2F6	Great Lakes	Trainer
IO-360-C1E6	Piper Aircraft	Seneca I (PA-34-200)

LO-360-A1G6D	Beech Aircraft	Duchess
LO-360-A1H6	Piper Aircraft	Seminole (PA-44)
IO-360-E1A	T.R. Smith Aircraft	Aerostar
IO-360-M1A	Diamond Aircraft	DA-40
IO-360-M1B	Vans Aircraft	RV6, RV7, RV8
	Lancair	360
AEIO-360-B1F	F.F.A.	Bravo (200)
	Grob	G115/Sport-Acro
AEIO-360-B1G6	Great Lakes	
AEIO-360-B2F	Mundry	CAP-10
AEIO-360-B4A	Pitts	S-1S
AEIO-360-H1A	Bellanca Aircraft	Super Decathlon (8KCAB-180)
AEIO-360-H1B	American Champion	Super Decathlon

(d) Any hub, part number (P/N) D-6522-1, retired from service under AD 2003-01-03 must not be returned to service under this AD unless an additional airworthiness determination is made and recorded in the appropriate propeller and or airplane maintenance logbook. Also, any hub, (P/N) D-6522-1, that is returned to service is still subject to the inspection requirements of this AD.

(e) The parentheses appearing in the propeller model number indicates the presence or absence of an additional letter(s) that varies the basic propeller model. This AD still applies regardless of whether these letters are present or absent in the propeller model designation.

### **Propellers Not Affected by This AD**

(f) Hartzell Propeller Inc. ()HC-()2Y(K, R)-() series propellers installed on the following aircraft are not affected by this AD, but are affected by AD 2001-23-08, which addresses the same unsafe condition:

(1) Aerobatic aircraft (including certificated aerobatic aircraft, military trainers, or any aircraft routinely exposed to aerobatic usage).

(2) Agricultural aircraft.

(3) Piper PA-32() series aircraft with Lycoming 540 series reciprocating engines rated at 300 horsepower or higher.

(4) Britten Norman BN-2() series aircraft with Lycoming 540 series reciprocating engines.

### **Unsafe Condition**

(g) This AD results from the need to make changes to the affected series designation of propellers, to expand the engine applicability, and to respond to comments received on AD 2006-18-

15. We are issuing this AD to prevent failure of the propeller hub causing blade separation and subsequent loss of airplane control.

### **Compliance**

(h) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

### **Initial Propeller Hub Eddy Current Inspection (ECI)**

(i) Within 50 operating hours time-in-service (TIS) after the effective date of this AD, perform an initial ECI of the front cylinder half of the propeller hub for cracks.

(j) Use paragraphs 3.A. through 3.A.(4)(g) of the Accomplishment Instructions of Hartzell Propeller Inc. Service Bulletin (SB) No. HC-SB-61-269, Revision 3, dated September 17, 2007, to perform the ECI.

(k) If any cracks are found, remove the propeller hub from service before further flight.

(l) If no cracks are found, mark the propeller using paragraph 3.A.(6)(a) of the Accomplishment Instructions of Hartzell Propeller Inc. SB No. HC-SB-61-269, Revision 3, dated September 17, 2007, to indicate compliance with Hartzell Propeller Inc. SB No. HC-SB-61-269, dated April 18, 2005.

### **Repetitive Propeller Hub ECIs**

(m) Within every 100 operating hours TIS after the last propeller hub ECI, perform repetitive ECIs of the front cylinder half of the propeller hub for cracks.

(n) Do not repetitively mark the propeller once it is initially marked as specified in paragraph (l) of this AD.

(o) If any cracks are found, remove the propeller hub from service before further flight.

### **Optional Terminating Action**

(p) As optional terminating action to the repetitive ECIs required by this AD:

(1) Replace the non-suffix SN propeller hub with a propeller hub identified by an "A" or "B" suffix letter in the propeller hub SN; except:

(2) Do not install a suffix "A" propeller hub that was previously installed on an aircraft affected by the original issue or later revision of Hartzell Propeller Inc. SB No. HC-SB-61-227.

(3) Replacement propeller hub part numbers can be found in paragraph 2.A., Material Information, of Hartzell Propeller Inc. SB No. HC-SB-61-269, Revision 3, dated September 17, 2007.

## **Alternative Methods of Compliance**

(q) The Manager, Chicago Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

## **Related Information**

(r) Hartzell Propeller Inc. SB No. HC-SB-61-227, Revision 2, dated April 18, 2005, and AD 2001-23-08 pertain to the subject of this AD.

(s) Contact Tim Smyth, Senior Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Small Airplane Directorate, 2300 East Devon Avenue, Des Plaines, IL 60018-4696; e-mail: timothy.smyth@faa.gov; telephone (847) 294-7132; fax (847) 294-7834, for more information about this AD.

## **Material Incorporated by Reference**

(t) You must use Hartzell Propeller Inc. Service Bulletin No. HC-SB-61-269, Revision 3, dated September 17, 2007, to perform the eddy current inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Hartzell Propeller Inc. Technical Publications Department, One Propeller Place, Piqua, OH 45356; telephone (937) 778-4200; fax (937) 778-4391, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on October 2, 2009.  
Peter A. White,  
Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.



**FAA**  
**Aircraft Certification Service**

## **AIRWORTHINESS DIRECTIVE**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

**2009-22-04 Eurocopter France:** Amendment 39-16055. Docket No. FAA-2009-0952; Directorate Identifier 2009-SW-04-AD.

### **Effective Date**

- (a) This airworthiness directive (AD) becomes effective on November 12, 2009.

### **Other Affected ADs**

- (b) None.

### **Applicability**

- (c) This AD applies to Model EC 155B and EC155B1 helicopters, all serial numbers, with the UNS-1D navigation system installed, certificated in any category.

### **Reason**

- (d) The mandatory continuing airworthiness information (MCAI) AD states that freezing of the route display on the navigation display in the Sector mode of the UNS-1D Flight Management System occurs when flight plans include procedures in the terminal zone (departure or arrival).

### **Actions and Compliance**

- (e) Before further flight, unless already accomplished, do the following:

(1) Make pen and ink changes, or insert a copy of this AD or an amended copy of Rotorcraft Flight Manual Supplement (RFM) 58 into the operating limitations section of the RFM with the following limitation: "USING FMS FOR SIDS, STARS AND INSTRUMENT APPROACHES IS PROHIBITED."

(2) Make a placard with black letters on white background with the following wording: "USING FMS FOR SIDS, STARS AND INSTRUMENT APPROACHES IS PROHIBITED." Install the placard on the console in place of the placard "USING GPS FOR INSTRUMENT APPROACHES IS PROHIBITED."

### **Differences Between This AD and the MCAI AD**

- (f) We state the actions in this AD rather than referencing the Emergency Alert Service Bulletin for installing the placard. Also, we allow the limitations to be made by making pen and ink changes to the Limitations section of the RFM.

## **Other Information**

(g) Alternative Methods of Compliance (AMOCs): The Manager, Safety Management Group, ATTN: DOT/FAA Southwest Region, George Schwab, ASW-111, Aviation Safety Engineer, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5114, fax (817) 222-5961, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(h) Ferry flight permits are not permitted.

## **Related Information**

(i) European Aviation Safety Agency (EASA) MCAI AD No. 2009-0035-E, dated February 18, 2009, and Eurocopter Emergency Alert Service Bulletin 04A008, dated February 17, 2009, contain related information.

## **Joint Aircraft System/Component (JASC) Tracking Code**

(j) JASC Code 3460 Navigation–UNS-1D Navigation System–Limitation.

Issued in Fort Worth, Texas, on September 16, 2009.

Larry M. Kelly,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



**FAA**  
**Aircraft Certification Service**

## AIRWORTHINESS DIRECTIVE

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

**2009-22-11 Bell Helicopter Textron Canada:** Amendment 39-16064. Docket No. FAA-2009-1003; Directorate Identifier 2009-SW-25-AD.

### Effective Date

- (a) This airworthiness directive (AD) becomes effective on November 16, 2009.

### Other Affected ADs

- (b) None.

### Applicability

(c) This AD applies to the following model and serial-numbered helicopters with an anti-drive (swashplate) link assembly (link assembly), part number (P/N) 406-010-432-101, that has a serial number (S/N) prefix of "TI" or "TIFS", certificated in any category:

Model	Serial Nos.
407	53000 through 53887, 53890 through 53916, 53918, 53920, 53921, 53923 through 53926, and 53928.
427	56001 through 56074.

### Reason

(d) The mandatory continuing airworthiness information (MCAI) AD states during a preflight check it was observed that the swashplate link assembly bearing had moved in the lever race, making contact with the swashplate support. The MCAI AD also states that further investigation revealed that the bearing had not been staked correctly during manufacture. That condition, if not detected, could result in failure of a bearing, failure of the link assembly, and subsequent loss of control of the helicopter.

### Actions and Compliance

- (e) Required as indicated, unless accomplished previously.

(1) Within 10 hours time-in-service (TIS), using a 10x or higher magnifying glass, inspect the link assembly and determine if the bearing, P/N 406-310-403-101, is correctly installed and properly staked in the link assembly. Also inspect to ensure that the bearing is not loose.

(2) Before further flight, replace any bearing that is incorrectly installed or improperly staked in the link assembly.



- (3) Before further flight, replace the link assembly if the bearing is loose.

### **Differences Between This AD and the MCAI AD**

(f) This AD differs from the MCAI AD as follows:

(1) This AD requires compliance within 10 hours TIS, the MCAI AD requires compliance within the next 10 flight hours, but no later than 30 days from the effective day of the MCAI AD, which was May 6, 2009; and

(2) This AD does not apply to Model 427 helicopters, S/N 58001 or 58002, because those serial-numbered helicopters are not eligible for an FAA certificate of airworthiness.

### **Other Information**

(g) Alternative Methods of Compliance (AMOCs): The Manager, Safety Management Group, FAA, ATTN: Sharon Miles, Aviation Safety Engineer, Rotorcraft Directorate, Fort Worth, Texas 76137, telephone (817) 222-5122, fax (817) 222-5961, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

### **Related Information**

(h) The following documents contain related information:

(1) Transport Canada AD No. CF-2009-14, dated April 15, 2009;

(2) Bell Helicopter Alert Service Bulletin No. 407-09-87, dated March 27, 2009; and

(3) Bell Helicopter Alert Service Bulletin No. 427-09-24, Revision A, dated March 30, 2009.

### **Joint Aircraft System/Component (JASC) Code**

(i) JASC Code 6230: Main rotor/swashplate.

Issued in Fort Worth, Texas on October 20, 2009.

Mark R. Schilling,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



**FAA**  
**Aircraft Certification Service**

## AIRWORTHINESS DIRECTIVE

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

**2009-23-01 Hawker Beechcraft Corporation:** Amendment 39-16072; Docket No. FAA-2008-1312; Directorate Identifier 2008-CE-065-AD.

### Effective Date

(a) This AD becomes effective on December 8, 2009.

### Affected ADs

(b) None.

### Applicability

(c) This AD applies to the airplane models and serial numbers listed below that are certificated in any category and equipped with a Hawker Beechcraft part number (P/N) 114-380041-11 (or FAA-approved equivalent P/N), 114-380041-13 (or FAA-approved equivalent P/N), 114-380041-15 (or FAA-approved equivalent P/N), or 114-380041-15OVH main landing gear (MLG) actuator. For the purposes of this AD action the phrase "or FAA-approved equivalent part number" in this AD refers to any PMA part that is approved by identity to the referenced part. Frisby Airborne Hydraulic, Inc. (Frisby) P/N 1FA10043-3 has parts manufacturer approval (PMA) by identity to P/N 114-380041-15; therefore, it is considered an FAA-approved equivalent P/N and the AD applies to airplanes with this part installed.

Models	Serial Numbers
(1) 1900	UA-3
(2) 1900C	UB-1 through UB-74, UC-1 through UC-174, and UD-1 through UD-6
(3) 1900D	UE-1 through UE-439

### Unsafe Condition

(d) This AD results from reports of leaking and cracked actuators. We are issuing this AD to detect and correct leaking and cracks in the MLG actuators, which could result in loss of hydraulic fluid. This condition could lead to an inability to extend or lock down the landing gear, which could result in a gear up landing or a gear collapse on landing.

### Compliance

(e) To address this problem, you must do the following, unless already done:

Note: The phrase "or FAA-approved equivalent part number" in this AD refers to any PMA part that is approved by identity to the referenced part.

Actions	Compliance	Procedures
(1) Do a one-time visual inspection of the MLG actuator for cracks.	Within the next 50 hours time-in-service after December 8, 2009 (the effective date of this AD) or within the next 30 days after December 8, 2009 (the effective date of this AD), whichever occurs later.	(i) For Hawker Beechcraft parts: Follow Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008. (ii) For PMA by identity: Either contact the aircraft certification office (ACO) using the contact information in paragraph (g)(1) of this AD for FAA-approved procedures provided by the PMA holder; or install Hawker Beechcraft parts and follow Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008, and follow any inspection required by this AD.

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(2) Do an initial ultrasonic inspection of the MLG actuator.	<p>Initially within the next 600 cycles after December 8, 2009 (the effective date of this AD) or within the next 3 months after December 8, 2009 (the effective date of this AD), whichever occurs first.</p> <p>(i) For those airplanes with overhauled MLG actuators (with less than 1,200 cycles) that have records that prove an internal fluorescent penetrant inspection has been done, you may do the initial ultrasonic inspection within the next 600 cycles after December 8, 2009 (the effective date of this AD) or within the next 1,200 cycles since the last overhaul, whichever occurs later.</p> <p>(ii) For those airplanes with MLG actuators with less than 8,000 cycles since new or MLG actuators that have records that prove the end caps are new (less than 8,000 cycles), you may do the initial ultrasonic inspection within the next 1,200 cycles after December 8, 2009 (the effective date of this AD) or upon accumulation of 8,000 cycles since the end caps were new, whichever occurs later.</p>	<p>(A) For Hawker Beechcraft parts: Follow Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008.</p> <p>(B) For PMA by identity: Either contact the ACO using the contact information in paragraph (g)(1) of this AD for FAA-approved procedures provided by the PMA holder; or install Hawker Beechcraft parts and follow Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008, and follow any inspection required by this AD.</p>
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(3) For all airplanes, do repetitive ultrasonic inspections of the MLG actuator.	Repetitively at intervals not to exceed every 1,200 cycles since the last ultrasonic inspection.	(i) For Hawker Beechcraft parts: Follow Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008. (ii) For PMA by identity: Either contact the ACO using the contact information in paragraph (g)(1) of this AD for FAA-approved procedures provided by the PMA holder; or install Hawker Beechcraft parts and follow Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008, and follow any inspection required by this AD.
(4) If cracks are found during any inspection required in paragraph (e)(1), (e)(2), and (e)(3) of this AD, replace the MLG actuator with one of the following: (i) MLG actuator P/N 114-380041-15 (or FAA-approved equivalent P/N) or 114-380041-15OVH that is new or has been inspected following paragraphs (e)(1), (e)(2), and (e)(3) of this AD and has been found to not have cracks; or (ii) An FAA-approved actuator. Installation of an MLG actuator P/N other than 114-380041-11 (or FAA-approved equivalent P/N), 114-380041-13 (or FAA-approved equivalent P/N), 114-380041-15 (or FAA-approved equivalent P/N), or 114-380041-15OVH terminates the inspection requirements of paragraphs (e)(1), (e)(2), and (e)(3) of this AD.	Before further flight after the inspection where the cracks are found.	(A) For Hawker Beechcraft parts: Follow Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008. (B) For PMA by identity: Either contact the ACO using the contact information in paragraph (g)(1) of this AD for FAA-approved procedures provided by the PMA holder; or install Hawker Beechcraft parts and follow Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008, and follow any inspection required by this AD.
(5) Do not install any MLG actuator P/N 114-380041-11 (or FAA-approved equivalent P/N) or 114-380041-13 (or FAA-approved equivalent P/N).	As of December 8, 2009 (the effective date of this AD).	Not applicable.

(f) If the number of cycles is unknown, calculate the compliance times of cycles in this AD by using hours time-in-service (TIS). Multiply the number of hours TIS on the MLG actuator by 4 to come up with the number of cycles. For the purposes of this AD:

- (1) 600 cycles equals 150 hours' TIS; and
- (2) 1,200 cycles equals 300 hours' TIS.

(g) If cracks are found during any inspection required in paragraphs (e)(1), (e)(2), or (e)(3) of this AD, report the size and location of the cracks to the FAA within 10 days after the cracks are found or within 10 days after December 8, 2009 (the effective date of this AD), whichever occurs later.

(1) Send report to Don Ristow, Aerospace Engineer, Wichita ACO, 1801 Airport Road, Room 100, Wichita, Kansas 67209; e-mail: donald.ristow@faa.gov.

(2) The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and assigned OMB Control Number 2120-0056.

### **Alternative Methods of Compliance (AMOCs)**

(h) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Don Ristow, Aerospace Engineer, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4120; fax: (316) 946-4107. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

### **Material Incorporated by Reference**

(i) You must use Hawker Beechcraft Mandatory Service Bulletin SB 32-3870, dated April 2008, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Hawker Beechcraft Corporation, P.O. Box 85, Wichita, Kansas 67201-0085; telephone: (800) 429-5372 or (316) 676-3140; Internet: <http://pubs.hawkerbeechcraft.com>.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on October 23, 2009.

Kim Smith,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.

# EMERGENCY AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)

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**DATE: October 29, 2009**

**AD #: 2009-23-51**

This Emergency Airworthiness Directive (AD) is prompted by reports of cracks in the main gearbox (MGB) mounting foot pads and foot ribs. The manufacturer is investigating the root cause of these cracks. Contributing factors may include corrosion and the bushing press fit in the mounting foot bolt hole. This condition, if not detected, could result in loss of the MGB and subsequent loss of control of the helicopter.

We have reviewed Sikorsky Alert Service Bulletin No. 92-63-020, dated September 11, 2009 (ASB), which describes procedures for visually inspecting the MGB assembly mounting foot pads and foot ribs for a crack and corrosion. The ASB specifies a 10-hour recurring visual inspection. If you suspect a crack, the ASB specifies a fluorescent penetrant inspection (FPI) or a dye penetrant inspection (DPI). If you find a crack, the ASB specifies replacing the MGB before further flight. Also, the ASB specifies treating any corrosion.

This unsafe condition is likely to exist or develop on other helicopters of the same type design. Therefore, this AD requires within 10 hours time-in-service (TIS), unless accomplished previously, and thereafter at intervals not to exceed 10 hours TIS, cleaning and inspecting each MGB assembly mounting foot pad and rib for a crack and corrosion. If no crack is found, the AD also requires applying a corrosion preventive compound. If you find a crack, the AD also requires replacing the MGB before further flight. If you find corrosion, bubbled paint, or paint discoloration, this AD also requires you to repair the MGB before further flight. The actions specified in this AD are interim actions.

This rule is issued under 49 U.S.C. Section 44701 pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this emergency AD.

**2009-23-51 SIKORSKY AIRCRAFT CORPORATION:** Directorate Identifier 2009-SW-52-AD.

Applicability: Model S-92A helicopters, with main gearbox (MGB) assembly, part number (P/N) 92351-15000-042 or -043, with MGB housing, P/N 92351-15110-042, -043, -044, or -045, installed, certificated in any category.

Compliance: Required as indicated.

To prevent loss of an MGB and subsequent loss of control of the helicopter, do the following:

(a) Within 10 hours time-in-service (TIS), unless accomplished previously, and thereafter at intervals not to exceed 10 hours TIS, clean and inspect each MGB assembly mounting foot pad and rib for a crack and corrosion in the area depicted in Figure 1; as shown in the examples in Figures 2, 3, and 4; of Sikorsky Alert Service Bulletin No. 92-63-020, dated September 11, 2009 (ASB). If no crack is found, apply the corrosion preventive compound to each foot pad and rib area.

Note 1: When conducting a visual inspection, use a bright, non-LED light.

(1) If you find a crack, replace the MGB before further flight.

(2) If you find corrosion, bubbled paint, or paint discoloration, before further flight, repair the affected area.

Note 2: Following the ASB Accomplishment Instructions accomplishes the intent of this AD.

(b) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Boston Aircraft Certification Office, ATTN: Michael Schwetz, Aviation Safety Engineer, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7761, fax (781) 238-7170, for information about previously approved alternative methods of compliance.

(c) The Joint Aircraft System/Component (JASC) Code is 6320: Main Rotor Gearbox.

(d) Copies of the applicable service information may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, mailstop s581a, 6900 Main Street, Stratford, CT, telephone (203) 383-4866, e-mail address [tsslibrary@sikorsky.com](mailto:tsslibrary@sikorsky.com), or at <http://www.sikorsky.com>.

(e) Emergency AD 2009-23-51, issued October 29, 2009, becomes effective upon receipt.

FOR FURTHER INFORMATION CONTACT: Michael Schwetz, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7761, fax (781) 238-7170.

Issued in Fort Worth, Texas, on October 29, 2009.

Mark R. Schilling,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.